

STORE EJECTION SYSTEM WITH DISPOSABLE PRESSURE VESSEL
AND ASSOCIATED METHOD OF OPERATION

ABSTRACT OF THE DISCLOSURE

There is provided a store ejection system and method that use a pressurized non-pyrotechnic gas as the source of energy and transfer mechanism for jettisoning a store, such as from an aircraft. The ejection system includes an on-board pressure vessel for holding the pressurized gas with a releasable valve configured to

5 hermetically seal the pressure vessel. The pressure vessel is releasably connected to system and the releasable valve is configured to be released after the pressure vessel is connected thereto so that the releasable seal hermetically seals the pressure vessel before the pressure vessel is connected to the pressure regulator. The ejection system also includes at least one actuation system and at least one pneumatically-driven

10 jettison mechanism for releasably retaining the store.

CLT01/4628284v2